

## UV High-Velocity Gas Signatures in the Direction to the VELA Supernova Remnant

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We have investigated the magnitude and morphology of high-velocity gas in the line of sight to the VELA supernova remnant by studying all O and B stars observed by IUE at high dispersion in this direction. The dataset includes 39 stars projected inside the x-ray perimeter, and 35 stars projected outside the x-ray perimeter but still within 2-3 degrees of the SNR. We find evidence for many more high-velocity components than have previously been identified, particularly in the higher ionization lines, and covering a much larger velocity range, up to -400 km/s and possibly higher. The high-velocity gas appears patchy over very small spatial scales suggesting a very inhomogeneous local interstellar medium into which the SNR is expanding. In addition, analysis of C IV line absorptions shows high-velocity components in 11 stars, 9 of which lie in a narrow angular region coincident with the remnant's weak western limb as seen in ROSAT x-ray images. We present detailed comparisons of x-ray and infrared emission versus UV absorption sightlines and discuss various interpretations of these IUE results.